

**Listing of Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-31 (Canceled)

32. (New) A method for forming a plastic product comprising the steps of:
- providing a mold having a first mold part, a second mold part and a slide movable within at least one of said first and second mold parts;
  - closing said first and second mold parts wherein a closed mold cavity is formed, said closed mold cavity being defined by said first mold part, said second mold part and said slide, and said slide being movable within said closed mold cavity;
  - injecting a plastic at a first temperature into said mold cavity while said movable slide is in a retracted position, said first temperature being above the melting temperature of said plastic;
  - cooling said plastic to a second temperature by directly contacting said plastic with an internal surface of at least one of said first mold part, said second mold part and said slide, said second temperature being lower than said first temperature and being below the melting temperature of said plastic wherein said plastic becomes at least partially solidified; and
  - reheating said plastic to a third temperature by moving said slide in a forward direction within said mold cavity, wherein said slide is moved at a speed sufficiently great so as to create heat in the plastic such that said third temperature is higher than said second temperature, and is at least about the melting point of said plastic whereby said plastic becomes more liquid.

33. (New) A method as defined in Claim 32, wherein said plastic is injected in said mold cavity at a filling pressure of less than 350 bars.

34. (New) A method as defined in Claim 32, wherein said third temperature is higher than said first temperature.

35. (New) A method as defined in Claim 32, wherein, prior to the injection of the plastic into the mold cavity, the slide is set at a passage distance, determined by the distance between one end, leading in the direction of movement, of the respective slide and an oppositely located wall part of the mold cavity, which distance is set on the basis of the melt of the plastic to be used in the mold cavity.

36. (New) A method as defined in Claim 35, wherein said passage distance is enlarged when using a plastic with a higher melt.

37. (New) A method as defined in Claim 32, wherein the slide is moved at a speed such that the movement of the slide takes place in, at most, approximately 20% of the total cycle time of a manufacturing cycle, determined by the time between the closure of the mold and the extraction of a ready product.

38. (New) A method as defined in Claim 37, wherein said movement of the slide is carried out in less than 3% of the total cycle time.

39. (New) A method as defined in Claim 32, wherein the closing pressure for the mold is smaller than the conventional injection molding apparatuses for the same products of the same material.

40. (New) A method as defined in Claim 32, wherein the feed pressure and speed are such that at least partial solidification of the plastic occurs during introduction of the plastic, while the or each slide is brought into the mold cavity such that therein adiabatic heat development takes place such that the plastic returns to a liquid condition, at least that its viscosity is reduced such that by moving the slide and, optionally, applying hold pressure, the respective mold cavity is completely filled.

41. (New) A method as defined in Claim 40, wherein overflow spaces are provided in the mold cavity, which are filled with the plastic, wherein the parts filled in the overflow spaces are used as engaging elements for extracting a product formed in the respective mold cavity.

42. (New) A method as defined in Claim 32, wherein the plastic does not completely fill the mold cavity during said injection step and the plastic completely fills the mold cavity during said reheating step.

43. (New) A method as defined in Claim 32, wherein said plastic is injected into said mold cavity with an injection device via an inflow opening of said mold cavity, and wherein said method further comprises the step of applying a hold pressure with said injection device to prevent plastic from exiting said inflow opening of said mold cavity during said reheating step.